

## TCLP

- Federal Register, Vol. 55, No. 61, of 29 Mar 90
- Replaces Extraction Procedure (EP) leach test with Toxicity Characteristic Leaching Procedure (TCLP)
- The TCLP adds 25 new organic constituents to the eight metals and six pesticides on the EP list of regulated constituents
- Will greatly expand the quantity of waste considered hazardous under Subtitle C of the Resource Conservation & Recovery Act (RCRA)

## TCLP ANALYSIS

- Cost up to 5 times cost of EP Tox (\$1500-2000 each)
- EPA Method 1311, identifies 39 constituents
- Uses zero headspace extractor for volatile organic constituents
- TCLP is generally more aggressive toward certain metals, such as lead, than the earlier EP Toxicity test. As a result, some inorganic wastes that passed EP Tox will become subject to HW regulations
- Limited number of labs capable of TCLP analysis

## TOXICITY CHARACTERISTIC CONSTITUENTS

<u>Constituent</u>	<u>Regulatory Level</u> (mg/L)
<b>Arsenic</b> .....	5.0
<b>Barium</b> .....	100.0
Benzene.....	0.5
<b>Cadmium</b> .....	1.0
Carbon Tetrachloride.....	0.5
Chlordane.....	0.03
Chlorobenzene.....	100.0
Chloroform.....	6.0
<b>Chromium</b> .....	5.0
<b>o-Cresol</b> .....	200.0*
<b>m-Cresol</b> .....	200.0*
<b>p-Cresol</b> .....	200.0*
<b>2,4-D</b> .....	10.0
1,4-Dichlorobenzene.....	7.5
1,2-Dichloroethane.....	0.5
1,1-Dichloroethylene.....	0.7
2,4-Dinitrotoluene.....	0.13
<b>Endrin</b> .....	0.02
Heptachlor (and its hydroxide).....	0.008
Hexachlorobenzene.....	0.13
Hexachloro-1,3-butadiene.....	0.5
Hexachloroethane.....	3.0
<b>Lead</b> .....	5.0
<b>Lindane</b> .....	0.4
<b>Mercury</b> .....	0.2
<b>Methoxychlor</b> .....	10.0
Methyl ethyl ketone.....	200.0
Nitrobenzene.....	2.0
Pentachlorophenol.....	100.0
Pyridine.....	5.0
<b>Selenium</b> .....	1.0
<b>Silver</b> .....	5.0
Tetrachloroethylene.....	0.7
<b>Toxaphene</b> .....	0.5
Trichloroethylene.....	0.5
2,4,5-Trichlorophenol.....	400.0
2,4,6-Trichlorophenol.....	2.0
2,4,5-TP (Silvex).....	1.0
Vinyl Chloride.....	0.2

**Boldface constituents - on original EP Tox list**

\*If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol concentration is used (200 mg/L)

## TCLP APPLICATION

- Defers applicability of TC rule for petroleum-contaminated media and debris subject to Underground Storage Tank (UST) regulations
- Exempts PCB wastes currently regulated by the Toxic Substance Control Act (TSCA)

## COMPLIANCE DATES FOR TC RULE

- 29 JUNE 90 Generators of 1000 kg/mo or more and TSDFs who have not previously notified must submit 3010 notification to EPA
- 29 SEPT 90 Large Quantity Generators must manage TC waste according to Subtitle C of RCRA
- \*Newly regulated facilities
    - Submit Part A permit application
  - \*Already regulated facilities
    - Submit amended Part A/B permits
- <sup>MAR</sup> 29 JUNE 91 Small Quantity Generators begin to comply with applicable RCRA Subtitle C for TC wastes

## IMPACTS ON NAVY ACTIVITIES

- Need to budget for additional analysis and disposal costs
- Operating permits may need to be amended to include additional wastestreams (new EPA waste codes)
- Waste Analysis Plans will require revisions to reflect new analytical procedures
- Wastestreams which may be TC wastes include
  - \*Sandblast grits
  - \*POTW and IWTP sludges
  - \*Used Oil not being recycled
  - \*Soil or debris from environmental cleanups (not associated with underground storage tanks)
- Closure and/or upgrade of land treatment units